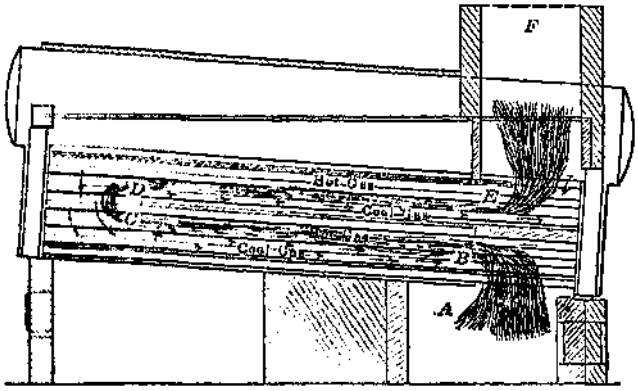
The slight amplitude of the temperature surges at C is due to The fact that this couple is located at a point where a pocket of hot gas occurs This would hold the temperature within rather close limits and it is fairly probable that these surges are due in part, to the infiltration of cold air, as those couples were located fairly close lo the center line of the boiler. This location would bring them between the two drums at a point where cold air might drop them thorn from leakage. The air leaking in at this point would be heated by the* brickwork. Stratification would not be likely



FKJ. 177.
Diagram showing the flow of gases in two pass horizontally baffled boiler. Temperature measurements made in this setting are shown in curves, Figs. 178 and 179. This boiler is the same size and make as the single pass shown in Fig 174. Presumably the steam was generated at about the same rate in both boilers. The location of cool gas pockets is indicated in the same manner as in Figs. 170 and 179.

at this locution tin the tubes have a tendency to mix the gases very completely UH they pans upward.

The large* amplitude of the temperature surges at *A* is probably due* to the fact that this couple was at times immersed in the jet

of ascending hot. gases and at other times in the eddy of com-
paratively cool gases at this point. Another factor that is men-
tioned in the caption of the curve is the formation of balls of
chilled gases among the tubes. These balls of cool gas will have a
tendency to drop into the lower portion of the setting, but will be
sustained by the up flowing current of hot gases. An analogy
in found in the submerged bubbles of air caused by a stream of
water falling into a body of water.